

according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 1 of 8

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

CO2 Cartridge

Art.-No.

506 0455, 596 0413, 596 0420, 596 0421, 596 4426, 596 4430

CAS No: 124-38-9 EC No: 204-696-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Tire repair material

1.3. Details of the supplier of the safety data sheet

Company name: REMA TIP TOP AG
Street: Gruber Strasse 65
Place: D-85586 Poing

Telephone: +49 (0) 8121 / 707 - 100

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

<u>number:</u> England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24

24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Gases under pressure: Compressed gas

Hazard Statements:

Contains gas under pressure; may explode if heated.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H280 Contains gas under pressure; may explode if heated.

Precautionary statements

P410+P403 Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards

Extremely cold liquid and gas under pressure. Causes severe frostbite.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: CO2
Molecular weight: 44 g/mol



according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 2 of 8

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to Regulation (EC) No. 1272/2008 [CLP]				
124-38-9	Carbon dioxide				
	204-696-9				
	Compressed gas; H280				

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

Take away from danger area and lay down affected person.

After inhalation

Remove the casualty into fresh air and keep him immobile.

Consult a physician.

If patient is not breathing, apply artificial respiration.

After contact with skin

In case of frostbite rinse with plenty of water. Don't remove clothing.

In case of frostbite due to intensive contact, consult a doctor.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Seek medical treatment by eye specialist.

After ingestion

Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

Higher concentrations may cause asphyxia due to reduced oxygen levels.

Rapid evaporation of the liquid may cause frostbite.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding.

Foam, carbon dioxide (CO2), dry chemical, water-spray

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Heating will cause pressure rise with risk of bursting.

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Cool containers at risk with water spray jet.

Vapours are heavier than air and spread along ground.



according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 3 of 8

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Ventilate the room well.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with the skin and the eyes.

Use only in thoroughly ventilated areas.

Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Use only in well-ventilated areas.

Advice on storage compatibility

No materials to be especially mentioned.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Tire repair material

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
124-38-9	Carbon dioxide	5000	9150		TWA (8 h)	WEL
		15000	27400		STEL (15 min)	WEL

8.2. Exposure controls

Protective and hygiene measures

Avoid contact with eyes and skin.

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Do not breath vapours or spray mist.

Eye/face protection

Safety goggles with side protection (EN 166).



according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 4 of 8

Hand protection

Not required under normal use.

Skin protection

Not required under normal use.

Respiratory protection

No personal respiratory protective equipment required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Gaseous
Colour: Colourless
Odour: Odourless

Test method

Changes in the physical state

Melting point: $-56,6\,^{\circ}\text{C}$ Initial boiling point and boiling range: $-78,5\,^{\circ}\text{C}$ Flash point: n.a.

Explosive properties

The product is not explosive.

Lower explosion limits:

Upper explosion limits:

n.a.

Ignition temperature:

n.a.

Oxidizing properties

Not fire-promoting.

Vapour pressure: 57300 hPa

(at 20 °C)

Density (at 20 °C): 0,75 g/cm³
Water solubility: 2 g/L
(at 20 °C)

Vapour density: 1,52

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Heating will cause pressure rise with risk of bursting. Vapours are heavier than air and spread along ground.

10.5. Incompatible materials

No materials to be especially mentioned.





according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 5 of 8

10.6. Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations

Contact with eyes may cause irritation.

Higher concentrations may cause asphyxia due to reduced oxygen levels.

Rapid evaporation of the liquid may cause frostbite.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

No data available.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods



according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 6 of 8

Advice on disposal

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

Waste disposal number of waste from residues/unused products

160505 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; gases in pressure containers other than those mentioned in 16 05 04

Contaminated packaging

Dispose of contents/container to approved disposal company or local collection.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 2037

14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)

14.3. Transport hazard class(es): 2
14.4. Packing group: -

Hazard label: 2.2



Classification code: 5A

Limited quantity: 1 L / 30 kg
Excepted quantity: E0
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 2037

14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)

14.3. Transport hazard class(es):214.4. Packing group:-

Hazard label: 2.2



Classification code: 5A

Limited quantity: 1 L / 30 kg
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 2037

14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)

14.3. Transport hazard class(es):2.214.4. Packing group:-Hazard label:2.2



Marine pollutant: No Limited quantity: 1 L / 30 kg



according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 7 of 8

Excepted quantity: E0 EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2037

14.2. UN proper shipping name: Receptacles, small, containing gas (gas cartridges)

14.3. Transport hazard class(es):2.214.4. Packing group:-Hazard label:2.2



Limited quantity Passenger: 1 kg
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:1 kgIATA-packing instructions - Cargo:203IATA-max. quantity - Cargo:15 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

2004/42/EC (VOC): 100 %

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water contaminating class (D): -- not water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

Changes in chapter:





according to Regulation (EC) No 1907/2006

CO2 Cartridge

Revision date: 07.06.2017 Product code: 00156-0431 Page 8 of 8

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H280 Contains gas under pressure; may explode if heated.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)